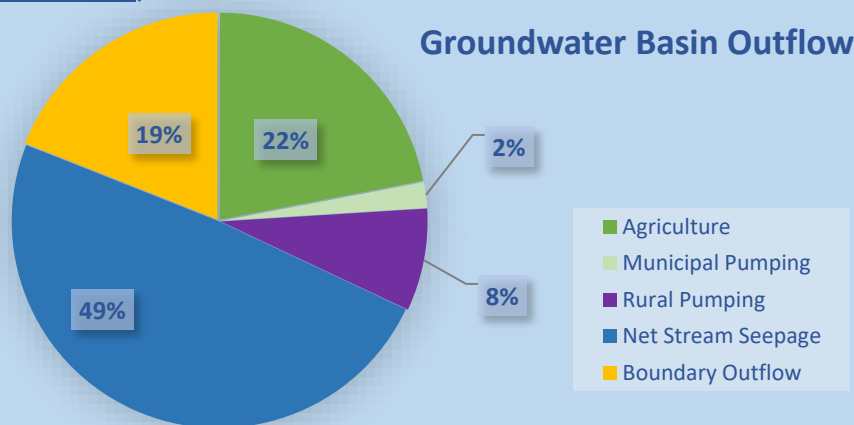


# Petaluma Valley Groundwater Basin (2-1)

## GROUNDWATER

### Use

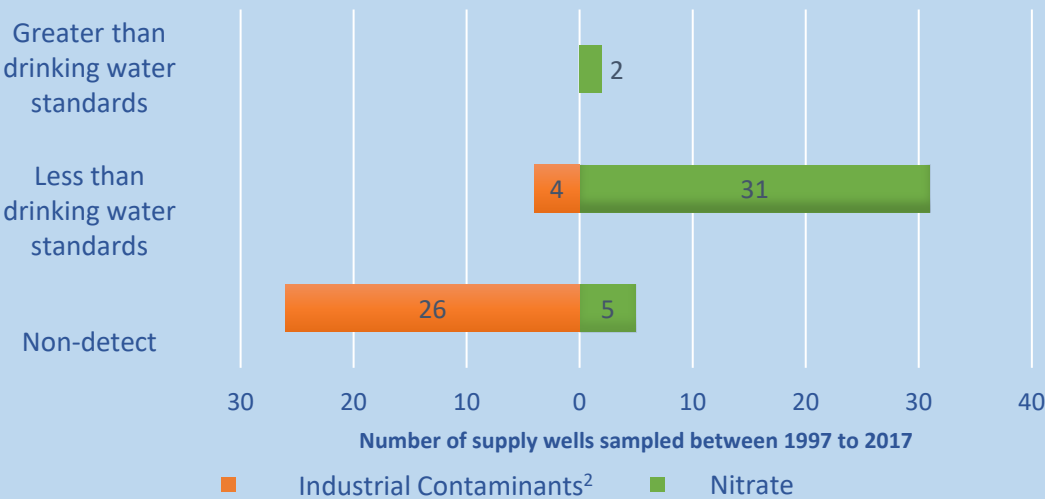
Sonoma County Water Agency, City of Petaluma, and North Marin Water District all serve as water agencies for the Petaluma Valley Basin. Groundwater accounts for 0% of the drinking water supply for the region in normal years, since the drinking water supply for the area is imported from the Russian River, but groundwater is listed as the emergency backup water supply source to be used in extremely dry years (UWMP, 2015). In 2015, total water use for the basin was estimated to be 11,729 acre-feet per year (UWMP, 2015). While groundwater is not regularly used as a source of municipal drinking water supply, outflows from the groundwater system include agriculture (22%), municipal pumping (2%), rural pumping (8%), net stream seepage (49%), and boundary outflow (19%) (USGS, 2018).



### Quality

Department of Water Resources' (DWR) [Bulletin 118](#) states that the quality of groundwater in the Petaluma Valley Basin varies considerably, with widespread and serious nitrate contamination affecting shallower aquifers.

#### Supply Well Sample Results<sup>1</sup>



<sup>1</sup>Data source: State Water Board Division of Drinking Water (DDW), Groundwater Ambient Monitoring and Assessment (GAMA), and GeoTracker GAMA

<sup>2</sup>Includes one or more of the following: Tetrachloroethene, Trichloroethene, 1,2,3-Trichloropropane, 1,4-Dioxane, Perchlorate, and Methyl tert-butyl ether

*Disclaimer:* Contaminant detections are from a majority of supply wells on specific dates between 1997 to 2017. They are not necessarily representative of water quality throughout an aquifer or the basin. Supply wells are mainly public but may include some domestic and irrigation wells.

### Recharge

Natural infiltration and seepage of precipitation is the primary source for aquifer recharge in the basin. The recycled water program is expanding and provides recycled water for landscaping, irrigation, agriculture, and other uses within parts of the basin as a way to offset groundwater pumping (UWMP, 2015).

## RESOURCES

[SF Bay Water Board - Groundwater](#)

[State Water Board Division of Drinking Water](#)

[Department of Water Resources](#)

[State Water Resources Control Board GAMA](#)

[City of Petaluma](#)

[Petaluma Valley Groundwater Sustainability Agency](#)



## MANAGEMENT

<b>Sustainable Groundwater Management Act (SGMA)</b>	<a href="#">Medium Priority</a>
<b>Groundwater Sustainability Agency (GSA)</b>	Petaluma Valley <a href="#">GSA</a> is a public agency, formed in 2017, that has a governing board, an administrator, and an advisory committee.
<b>Groundwater Management Plan (GMP)</b>	No GMP exists, however, a <a href="#">USGS groundwater study</a> will provide the basis for a SGMA Groundwater Sustainability Plan required by 2022.
<b>Salt and Nutrient Management Plan (SNMP)</b>	No SNMP
<b>Basin Monitoring</b>	DWR monitors 13 wells semiannually for groundwater-level data. The monitoring network has been supplemented through the California Statewide Groundwater Elevation Monitoring Program, which includes an additional nine wells ( <a href="#">Petaluma Valley GSA</a> ).

### Water Board Groundwater Protection Actions<sup>4</sup>

Active Site Cleanups	10
Landfills, Mines, and Compost Facilities	5
Regulated Wastewater Discharges (dairies, confined animals, wineries, wastewater treatment plants, etc.)	26
Permitted Recycled Water Projects (including discharge to land)	1
Groundwater Ambient Monitoring and Assessment	<a href="#">2004a</a> , <a href="#">2004b</a> , <a href="#">2004-08</a> , <a href="#">2004-14</a> , <a href="#">2010</a> , <a href="#">2012a</a> , <a href="#">2012b</a> , <a href="#">2018</a>

<sup>4</sup>As of January 2018. Includes all actions within the basin's watersheds.